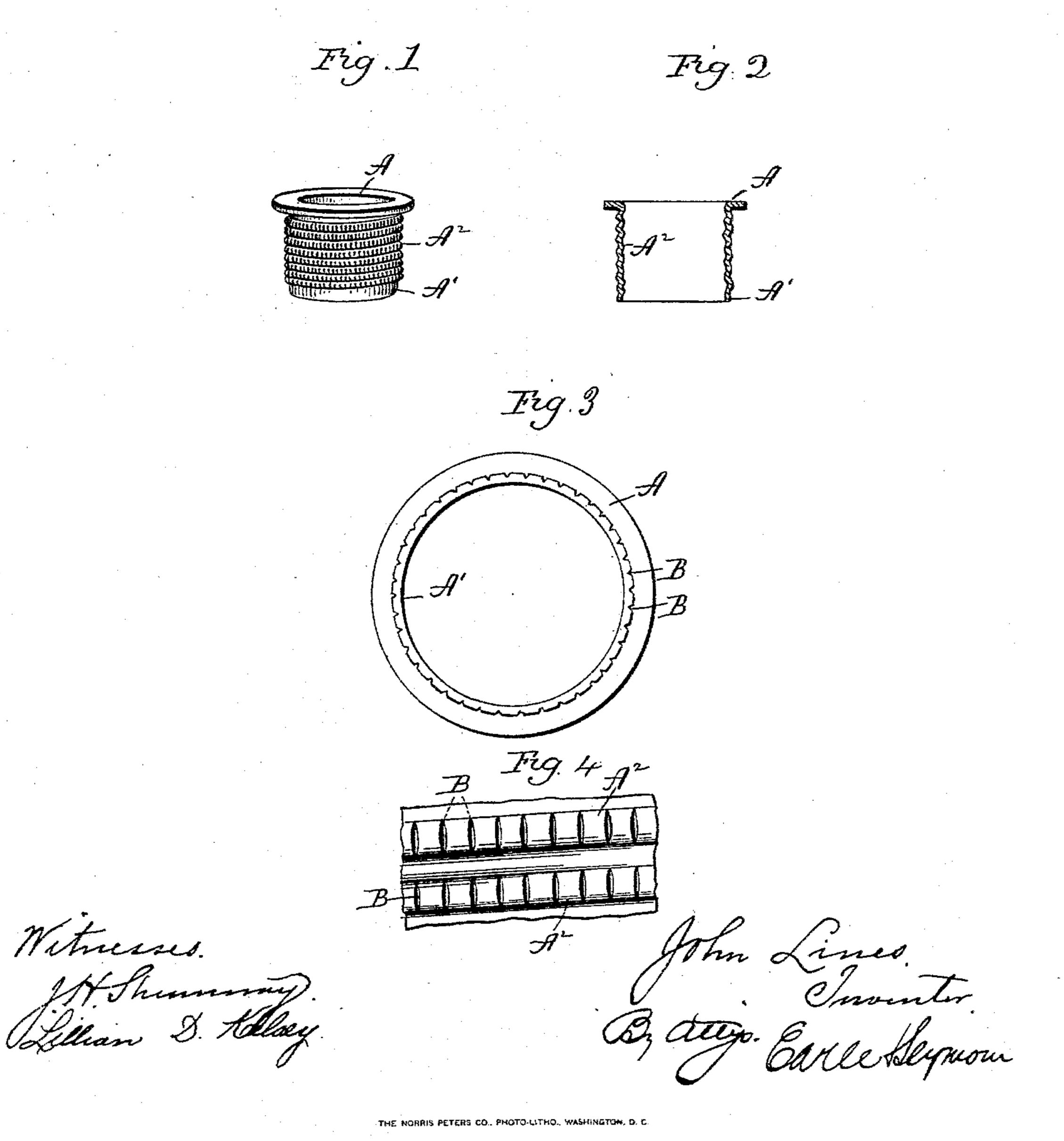
(No Model.)

J. LINES. NIPPLE FOR HOT WATER BAGS.

No. 589,734.

Patented Sept. 7, 1897.



United States Patent Office.

JOHN LINES, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE SCOVILL MANUFACTURING COMPANY, OF SAME PLACE.

NIPPLE FOR HOT-WATER BAGS.

SPECIFICATION forming part of Letters Patent No. 589,734, dated September 7, 1897.

Application filed July 20, 1896. Serial No. 599,812. (No model.)

To all whom it may concern:

Be it known that I, John Lines, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Nipples for Hot-Water Bottles; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a nipple constructed in accordance with my invention; Fig. 2, a view thereof in central longitudinal section; Fig. 3, an enlarged reverse plan view thereof; and Fig. 4, a greatly enlarged broken view in side elevation, showing a portion of the exterior surface of the nipple.

My invention relates to an improvement in nipples for the reception of the plugs or stoppers of hot-water bags and kindred vessels, the object being to produce at a low cost for manufacture a durable and effective nipple.

With these ends in view my invention consists in a sheet-metal nipple constructed at its outer end with an outwardly-turned flange, having a spiral thread rolled into it, and having its threaded outer surface roughened, for the better securing of it in place, by means of notches formed in the screw-threads and extending in line with the longitudinal axis of the nipple.

In carrying out my invention I form the nipple by subjecting a suitable blank to the required operations, its upper end having an outwardly-turned annular flange A, and its body A' having screw-threads A² rolled into it to adapt it to receive a plug or stopper, which may be of any approved construction and which is externally threaded to take into the internal threads of the nipple. By rolling a thread into the nipple its outer surface is threaded as well as its inner surface, and for increasing the roughness of its outer surface the high points or crowning edges of the threads are formed with notches B, located in line with the longitudinal axis of the nip-

ple and substantially at a right angle to the threads A² thereof, the notches being arranged in vertical lines, so to speak, and formed by subjecting the threaded nipple to the action of a die. The particular form and number of these notches may be varied, as desired, though they should not in any case 55 cut through the metal from which the nipple is formed.

I am aware that it is not new to roughen the exterior surface of a stopper or nipple for the purpose of assisting in its retention in 60 place, and do not claim that idea broadly.

I am also aware that a nipple having internal and external threads is old.

Having fully described my invention, what I claim as new, and desire to secure by Letters 65 Patent, is—

A sheet-metal nipple for insertion into hotwater bags for the reception of plugs or stoppers therefor, the said nipple being formed from a single piece of sheet metal, furnished 70 at its outer end with an outwardly-turned flange, and having a spiral thread produced in its body portion so as to form internal screw-threads for engagement by the threads of a plug or stopper, and so as to form exter- 75 nal screw-threads by which the nipple is fastened in place within the mouth of the bag, the high points or crowning edges of said external threads having formed in them vertically - arranged, cross - sectionally wedge- 80 shaped notches, provided for increasing the grip between the nipple and the mouth of the bag, arranged in a series of lines at equal distances apart, extending parallel with the longitudinal axis of the nipple, and formed 85 by subjecting the nipple to the action of a die which produces the notches without cutting through the metal, substantially as described.

In testimony whereof I have signed this 90 specification in the presence of two subscribing witnesses.

JOHN LINES.

Witnesses:

M. J. WARNER, GEO. F. HODGES.